

I. IN THE SPECIFICATION:

Please enter the following amendments to the Specification.

In the Brief Description of the Drawings:

1. On page 4 after paragraph [00019] but before paragraph [00020], please add the following.

Fig. 5 is a side elevation, partially cutaway, of a transportation vehicle having a containment section including a sub-micron filter exhaust and a safety rail for safely transporting a plurality of waste containers to a waste processing site;

Fig. 6 is a fragmented side elevation of the rear end of the transportation vehicle of Fig. 5 showing the waste containers being loaded onto a horizontal section of a conveyor belt for delivery to a waste disposal system;

Fig. 7 is a fragmented side elevation of the processing system showing the waste containers being transported by the horizontal section of the conveyor belt, an elevator mechanism, and a roller conveyor system towards the waste disposal system; and

Fig. 8 is a perspective view of the processing system showing the waste containers being transported across the conveyor belt and up the elevator mechanism, across the roller conveyor system, and being emptied via a mechanical system into the waste disposal system.

2. On page 5, paragraph [00022], please enter the following replacement paragraph.

Fig. 2 provides a diagram illustrating different components of the containment step 20 according to one embodiment of the present invention. As shown in Figure 2, the containment step 20 begins with selecting and classifying appropriate waste containers 29 at a pre-waste generator site 22. Appropriate types and sizes of containers 29 are determined and selected 21 at this stage. Using information provided by the waste generator as well as historic information, as experience with a waste generator or specific waste stream increases, specific data relating to that generator can be used to refine the process at site 22.

3. On page 7, paragraph [00033], please enter the following replacement paragraph.

After collecting the waste at the waste generator site 24, in one embodiment, transportation 26 takes place. A specially equipped transportation vehicle 31 having a containment section 33 may be used to reduce or prevent any atmospheric, liquid or solid leakage or spillage of the wastes or its contents, e.g., airborne pathogens. The containment section 33 of the transportation vehicle 31 may maintain a sub micron filtered exhaust 34 which when the containment section 33 is secured shut creates a pressure that is negative to the atmospheric pressure thereby substantially limiting leakage from any spills or vapor leaks within the vehicle box. It is to be understood that the containment section 33 described herein may be constructed utilizing other methods well known in the art which can maintain negative pressure with other purification systems. Also, emergency lighting and roadway lights can be "on" all the time for high visibility, safety, and special night operations lighting. Further, brackets and/or a safety rail 35 may be provided within the containment section 33 of the transportation vehicle 31 to safely secure the waste containers 29. To properly respond to an emergency or spill, each transportation vehicle 31 is preferably provided with an infectious or hazardous safety kit and also trained personnel to address such an emergency.

4. On page 8, paragraph [00037], please enter the following replacement paragraph.

In addition to the containment step 20 described above, the present invention provides an economically efficient and environmentally friendly way of treating and disposing of wastes. As illustrated in Fig. 3, at the processing step 40, the waste is preferably treated and disposed of by utilizing a system that is capable of substantially eliminating leachable solids or the exhaustion of hazardous gases into the atmosphere, e.g., the PEM system that utilizes plasma arc and joule heaters as described in the patents referenced above. The PEM system also transforms the waste into useful syngas, and stable, non-leachable solid -vitrified glass and metal- end- products. The PEM system can convert the organic portion of the waste into a useful hydrogen-rich gas while converting the inorganic portion of the waste into a vitreous glass-like material and metal end-products which are recyclable or reusable.

5. On page 9, paragraph [00038], please enter the following replacement paragraph.

In one embodiment, the processing step 40 comprises three sub-elements: loading step 42, treatment step 44, and end-products collection/recycling step 46. Preferably, all wastes are treated and recycled on the day of receipt at the waste processing site 28. The loading step 42 comprises placing the waste containers 29 on a conveyor belt 41 which moves the containers 29 to the waste disposal system 43, e.g., the PEM unit. In one embodiment, the containers 29 are moved in the following sequence: (1) First, the containers 29 travel along the horizontal section 45 of the conveyor belt 41 which is, in one embodiment, about 125-foot long; (2) Next, the containers 29 are raised approximately 15 feet by an elevator mechanism 47; (3) Then, the containers 29 move onto a roller conveyor system 48; and (4) Finally, each container 29 is automatically picked up by a mechanical system 49 and fed into the PEM unit.

6. On page 9, paragraph [00039], please enter the following replacement paragraph.

After the waste is properly treated, the end-products of the waste treatment may be collected. For the PEM system 47, the end-products include hydrogen-rich gas, glass and metal materials as described above. The syngas produced may be used as a fuel to process other wastes in the PEM system. Substantially, all carbon containing components in the waste are converted to syngas components or elemental carbon. The syngas may be used for ~~[[on site]]~~ on-site electricity generation in, for example, fuel cells, reciprocating engines, or gas turbines. The vitrified glass end products may be used to form useful commercial products 82 such as roofing tiles, insulating panels and other construction-related products and for the generation of sandblasting mediums. The metal end-products may also be remelted and processed to create useful alloys. If the solid end products are not used to form any commercial products, the solid end products may instead be disposed without risk to the environment since they are safe and stable. The phrase "end-products" used herein thus includes the useful syngas as well as the stable, ~~nonleacheable~~ non-leachable solid glass and metal materials that are recovered from the waste processing step 40.

7. On page 11, paragraph [00048], please enter the following replacement paragraph.

The status tracking 70 of the present invention thus makes it possible if desired to access and confirm the status of each waste container 29 from the point of [[drop off]] drop-off and [[pick up]] pick-up to complete processing of the waste, and to plan and schedule for treatment 84 of the waste, thereby fostering an efficient use of the waste disposal system 43. In one embodiment, the status tracking 70 goes one step further and includes the step of collecting and tracking information regarding any end-products to generated from the waste such as the end-products' content, weight, testing status and results and whether the end-products can be used or recycled.

8. On page 12, paragraph [00052], please enter the following replacement paragraph.

Once a sufficient amount of data are compiled, the waste processor may analyze and correlate the type, content, volume and/or weight information of the waste to the operating parameters of the waste disposal system 43 such as the PEM unit. In this way, the processor can develop a specific and efficient waste-operating recipe based on the specific type and composition of the waste 86. In one embodiment, products not consisting of waste may be introduced to the system to formulate appropriate recipes to create appropriate end products. In yet another embodiment, by estimating the carbon content 88 of the incoming waste, the waste processor may utilize the waste itself as a fuel 90 to operate the waste disposal system 43, e.g., feed a waste stream with sufficient carbon content to generate enough energy from the end products to operate the waste destruction process.

9. On page 12, paragraph [00053], please enter the following replacement paragraph.

Information about the end-products' yield and recyclability 92 may be correlated to the type and composition of the waste 86, and such information may be relevant in determining and/or adjusting the waste disposal fee 94. For example, if certain wastes provide a valuable revenue stream from their end products, there might be an economic incentive to charge a discounted fee to the waste generators whose wastes produce a high yield of reusable or recyclable end products.